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June 12, 1992

**Via Hand Delivery**

Gregory L. Lattimer, Esquire  
U.S. Department of Justice  
10th Street & Pennsylvania Ave., N.W.  
Room 1544  
Washington, D.C. 20530

Re: Refined Metals Corporation

Dear Greg:

As per your request during the telephonic conference call conducted on May 22, 1992, please find enclosed a draft closure plan prepared by Resource Consultants, Inc., consultant to Refined Metals Corporation.

The closure plan was prepared to provide EPA and IDEM with an idea of how Refined Metals Corporation proposes to proceed forward with closure and future storage activities. Under separate cover, we will provide you with several drawings that will be attachments to the closure plan.

As we discussed during the settlement meeting conducted on May 14, the enclosed document is being submitted in draft because of several unresolved issues. First, Refined Metals is waiting for the final promulgation by EPA of the containment building rule. That rule is expected to be issued on or before June 30. The criteria set forth in the rule will likely impact the Company's proposed storage activities.

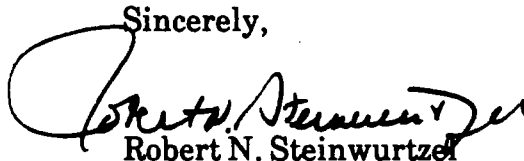
The other remaining matter concerns the position of IDEM and EPA regarding: (i) approval of closure activities on a phased approach; (ii) the scope of corrective action and whether the RFI and corrective measures, if any, can be accomplished on a facilitywide basis; and (iii) method of storage and timing of the Part B permit approval process. We understand that EPA and IDEM officials intend to confer regarding the issues identified herein.

Gregory L. Lattimer, Esq.  
June 12, 1992  
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On behalf of Refined Metals Corporation, I trust that this submission will assist the agencies in understanding the technical approach discussed by the Company during the May 14 meeting.

Sincerely,



Robert N. Steinwurtzel

RNS/rah

Enclosure

cc: Tom Jacobs, Esquire (w/enclosure) ✓  
Mathew Scherschel, Esquire (w/enclosure)  
Mr. T. W. Freudiger (w/out enclosure)  
Tom Lotterman, Esquire (w/out enclosure)  
Mr. Jack E. Waggener (w/out enclosure)

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**CLOSURE PLAN  
FOR  
REFINED METALS CORPORATION'S  
MATERIAL STORAGE BUILDING  
AND OUTSIDE STORAGE AREA**

**JUNE 1992  
RCI PROJECT NO. 1-3587.01**



**CLOSURE PLAN  
FOR  
REFINED METALS CORPORATION'S  
MATERIAL STORAGE BUILDING  
AND OUTSIDE STORAGE AREA**

**JUNE 1992  
RCI PROJECT NO. 1-3587.01**

**Prepared for:**

**REFINED METALS CORPORATION  
Beech Grove, Indiana**

**Prepared by:**

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## PHASE I CLOSURE NEW MATERIAL STORAGE BUILDING

As a result of the continuous operation of the secondary lead smelting process, additional covered material storage area will be required in order to maintain production during the closure activities. The construction of new material storage building may require, as a first step, the appropriate modification of site permits.

*management in container not within the material storage bld. for new created waste*

### CLOSURE SEQUENCE

Detailed design of the new material storage building will be developed during an estimated 8 week period. Once completed, the plans will be submitted to the regulatory agencies for approval, the regulatory approval process is estimated to take 6 weeks.

Phase I Closure will begin 6 weeks after receipt of written approval of permit modifications, if required, detail designs and specifications for the regulatory agencies. During the first 4 weeks of this period, vendor selection and contract letting will take place.

*Does the new material storage bld. extent into or include some of the existing outdoor areas, which had been intended in the past to manage waste.*

Upon completion of contractor and vendor selection, preparation for construction of the new building will begin.

1. Existing facilities equipment or services will be removed and/or relocated from the area where the new building will be constructed. This includes the removal of an obsolete baghouse from the area near the existing material storage building. (3 weeks)
2. All process materials stored or located within the area to be cleaned will be removed to other areas of the plant. Inter-plant traffic will be routed around the affected area. (2 weeks)

3. The surface will be inspected for damage and repaired as needed.  
(2 weeks)
4. Utilizing a high pressure washer the surface in the area will be triple rinsed. Wastewater from this process will be directed to the on-site treatment plant. The final rinse will be sampled and analyzed for: lead, cadmium, and arsenic. Should this testing indicate significant residues remain (greater than 5 ppm for lead or arsenic, 1 ppm of cadmium) an additional rinse and follow-up sampling will be performed. This process will continue until no further evidence of significant residue is found in the rinse sample. (2 weeks)
5. Install new floor (4 weeks). New floor consists of:
  - Placement of a new 1-inch asphalt layer over the existing surface.
  - Place and compact 1½-inch sand layer over asphalt layer.
  - Install synthetic liner over sand layer.
  - Place and compact 1½-inch sand layer over liner.
  - Placement of an 8-inch reinforced concrete slab over the sand layer.

NOTE: None of the existing surface will be removed or excavated during construction activities.

6. Construction of new building. (6 weeks)
7. Prepare area for service. (1 week)

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## PHASE II CLOSURE EXISTING MATERIAL STORAGE BUILDING

*Storage in Containers  
Prior to use, not in the  
existing waste pile*

Due to the continuous operation of a secondary lead smelting process, blast furnace feed material must be accumulated and stored prior to use. Therefore during the closure activities scheduled for the material storage building, the blast furnace and smelting process will be in operation. As a result, only a portion of the material storage building will be removed from use, emptied, decontaminated and closed at any one time. It is proposed that the material storage building will be closed in five (5) sections. Three (3) sections contain bins used to store scrap and other materials destined for the blast furnace. One section contains a pug mill used to treat slag, and one section contains a scale used to weigh furnace charges. Once closure activities have been completed on one section it will be returned to use, and the process repeated sequentially for the remaining sections. For the fourth and fifth sections additional time has been allowed to facilitate the removal and replacement of the pug mill, ~~crusher~~, and scale.

### CLOSURE SEQUENCE

Detail design of the new floor will be developed during an estimated 8 week period. Once completed the plans will be submitted to the regulatory agencies for approval, estimated approval time is 6 weeks. This time period will run concurrent with Phase I Closure activities with all detail designs submitted together.

Phase II closure will begin 2 weeks after completion of new material storage building as described in the Phase I Closure section.

Closure of the existing material storage building will proceed as follows:

- Scrap that happens to be slag and pieces of group drops & sludge*
1. Scrap material will be removed from the bins in affected area.  
(1-week)



2. The affected area will be isolated from the remainder of the building by a plastic sheeting supported by 2" x 4" studding. (1 week)
3. Inspect floor surfaces for damage and repair as needed. (3 weeks)
4. Utilizing a high pressure washer the floor, bin walls, and any pillars in the area will be triple rinsed. Waste water from this process will be directed to the on-site treatment plant. The final rinse will be sampled and analyzed for lead, cadmium, and arsenic. Should this testing indicate significant residues remain (greater than 5 ppm for lead or arsenic, 1 ppm of cadmium) an additional rinse and follow-up sampling will be performed. This process will continue until no further significant evidence of residue is found in the rinse sample. (3 weeks)
5. Installation of new floor (4 weeks). New floor consists of:
  - Placement of 1-inch of asphalt over the existing floor.
  - Place and compact 1½ inch sand layer over asphalt layer.
  - Install synthetic liner over sand layer.
  - Place and compact 1½ inch sand layer over liner.
  - Finally, an 8 inch reinforced concrete slab is laid over the area.

6. Return area to service. (3 weeks)

Total Estimated Time Section 1: 17 weeks.

Total Estimated Time Sections 2 and 3: 15 weeks/section.

Total Estimated Time Sections 1-3: 47 weeks.

As one section is finished, work will progress to the next section sequentially until the closure of the entire building is complete.

Section 4 of the material storage building contains a pug mill. Closure of this section will involve the same steps as discussed for Sections 1-3; although item 1 becomes the removal of the pug mill and crusher, and item 9 is the replacement of this equipment prior to returning this area to service.

1. Disassemble and remove pug mill and crusher. (2 weeks)
2. Scrap material will be removed from the bins in affected area. (1 week)
3. The affected area will be isolated from the remainder of the building by a plastic sheeting supported by 2" x 4" studding. (1 week)
4. Inspect floor surfaces for damage and repair as needed. (3 weeks)
5. Utilizing a high pressure washer the floor, bin walls, and any pillars in the area will be triple rinsed. Waste water from this process will be directed to the on-site treatment plant. The final rinse will be sampled and analyzed for: lead, cadmium, and arsenic. Should this testing

indicate significant residues remain (greater than 5 ppm for lead or arsenic, 1 ppm of cadmium), an additional rinse and follow-up sampling will be performed. This process will continue until no further significant evidence of residue is found in the rinse sample.  
(3 weeks)

6. Installation of new floor (4 weeks). New floor consists of:

- Placement of 1 inch of asphalt over the existing floor.
- Place and compact 1½ inch sand layer over asphalt layer.
- Install synthetic liner over sand layer.
- Place and compact 1½ inch sand layer over liner.
- Finally, an 8 inch reinforced concrete slab is laid over the area.

7. Install equipment foundation and pier. (3 weeks)

8. Reassemble and replace pug mill and crusher. (2 weeks)

9. Return area to service. (1 week)

Total Estimated Time for Section 4: 20 weeks.

Section 5 of the material storage building contains a scale used for weight material charges for the blast furnace, along with electrical service boxes. Closure of this section will involve the same steps as discussed previously, with additional steps involving disassembly/assembly of the scale.

1. Disassemble and remove scale. (2 weeks)
2. Scrap material will be removed from the bins in affected area. (1 week)
3. The affected area will be isolated from the remainder of the building by a plastic sheeting supported by 2" x 4" studding. (1 week)
4. Inspect floor surfaces for damage and repair as needed. (3 weeks)
5. Utilizing a high pressure washer the floor, bin walls, and any pillars in the area will be triple rinsed. Waste water from this process will be directed to the on-site treatment plant. The final rinse will be sampled and analyzed for: lead, cadmium, and arsenic. Should this testing indicate significant residues remain (greater than 5 ppm for lead or arsenic, 1 ppm of cadmium) an additional rinse and follow-up sampling will be performed. This process will continue until no further significant evidence of residue is found in the rinse sample. (3 weeks)
6. Installation of new floor (4 weeks). New floor consists of:
  - Placement of 1-inch of asphalt over the existing floor.

- Place and compact 1½ inch sand layer over asphalt layer.
  - Install synthetic liner over sand layer.
  - Place and compact 1½ inch sand layer over liner.
  - Finally, an 8 inch reinforced concrete slab is laid over the area.
7. Reassemble and replace scale. (3 weeks)
  8. Elevate electrical service and reconnect scale. (3 weeks)
  9. Return area to service. (1 week)

Total Estimated Time for Section 5: 21 weeks.

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## PHASE III CLOSURE OUTSIDE STORAGE AREAS

Following the completion of material storage building closure activities, work will proceed to the outside storage areas Sections 1 and 2. Due to the possibility for inclement weather to hamper these activities, as well as the potential for interference with the normal operation of the plant closure will be conducted in a sequential manner. A section of the outside storage area will be set aside for closure. All activity in the area will be transferred to other areas of the plant. This cleared area will be cleaned with a high pressure washer with the resulting wastewaters treated on-site. Once an area has been closed it will not be utilized for the storage of batteries.

The total area to be cleaned has been divided into two sections. Section 2 contains two structures which will be installed after surface cleaning is complete, a truck apron, and a covered entry ramp to the material storage building.

*These 2 areas does not  
cover other outdoor areas  
identified by IDEM*

### CLOSURE SEQUENCE

1. All materials located or stored within the area to be cleaned will be removed to other areas of the plant. Intraplant traffic will be routed around affected area. (1 week)
2. Inspect floor surfaces for damage and repair as needed. (3 weeks)
3. Utilizing a high pressure washer the concrete surface in the area will be triple rinsed. Waste water from this process will be directed to the on-site treatment plant. The final rinse will be sampled and analyzed for: lead, cadmium, and arsenic. Should this testing indicate significant residues remain (greater than 5 ppm for lead or arsenic, 1 ppm of cadmium) an additional rinse and follow-up sampling will be

performed. This process will continue until no further evidence of significant residue is found in the rinse sample. (4 weeks)

4. Return area to service. Closed areas will not be used to store batteries.  
(1 week)

Total Estimated Time Sections 1 and 2: 9 weeks/section.

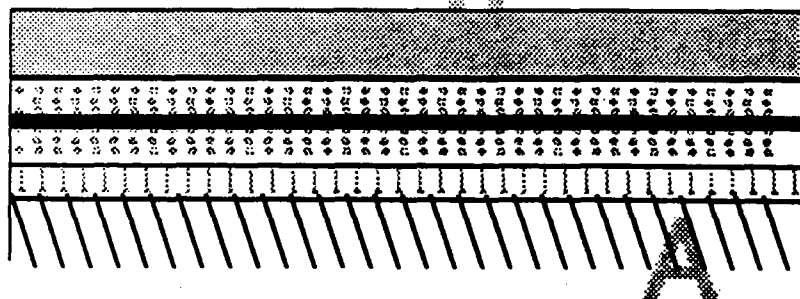
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**REFINED METALS  
BEECH GROVE, INDIANA  
PROPOSED FLOOR CROSS SECTION  
FOR PHASE I AND II CLOSURE**



8" Concrete  
1½" Sand  
Synthetic Liner  
1½" Sand  
1" Asphalt  
Existing Concrete or  
Asphalt Surface

Not to Scale

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**PRE-CLOSURE ACTIVITIES  
REFINED METALS  
BEECH GROVE, INDINA**

| ACTIVITY  | ESTIMATED WEEKS TO COMPLETE |        |       |       |
|---|-----------------------------|--------|-------|-------|
|   | 0                           | 8      | 14    | 20    |
| Detail Design/Specification                     |                             | 8 wks  |       |       |
| Regulatory Review and Approval of Detail Design |                             |        | 6 wks |       |
| Vendor Selection Contractor Letting             |                             |        |       | 6 wks |
| PRE-CLOSURE ESTIMATED TOTAL                     |                             | 20 WKS |       |       |

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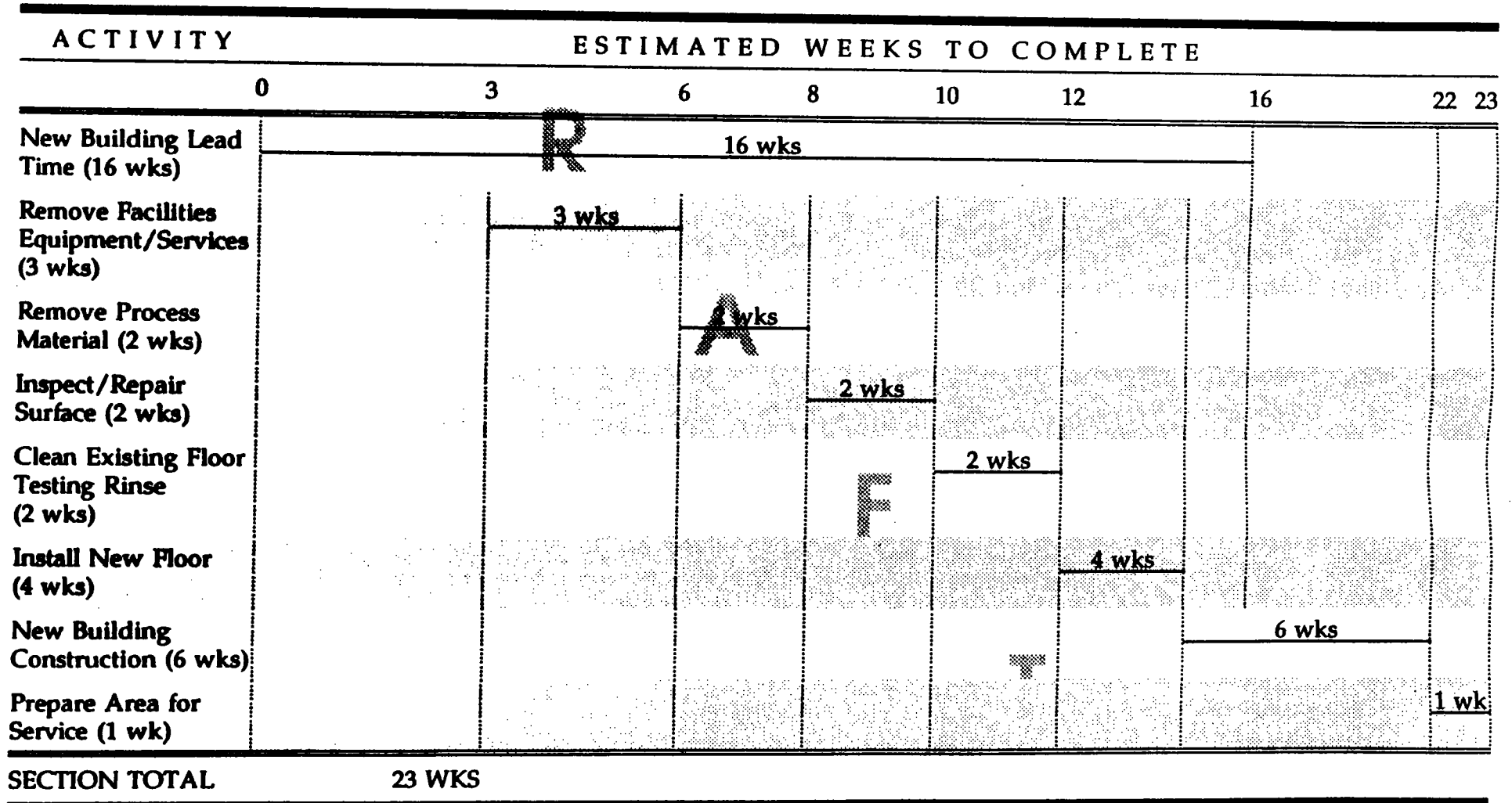
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**CLOSURE PLAN TIME LINE  
REFINED METALS  
BEECH GROVE, INDIANA**

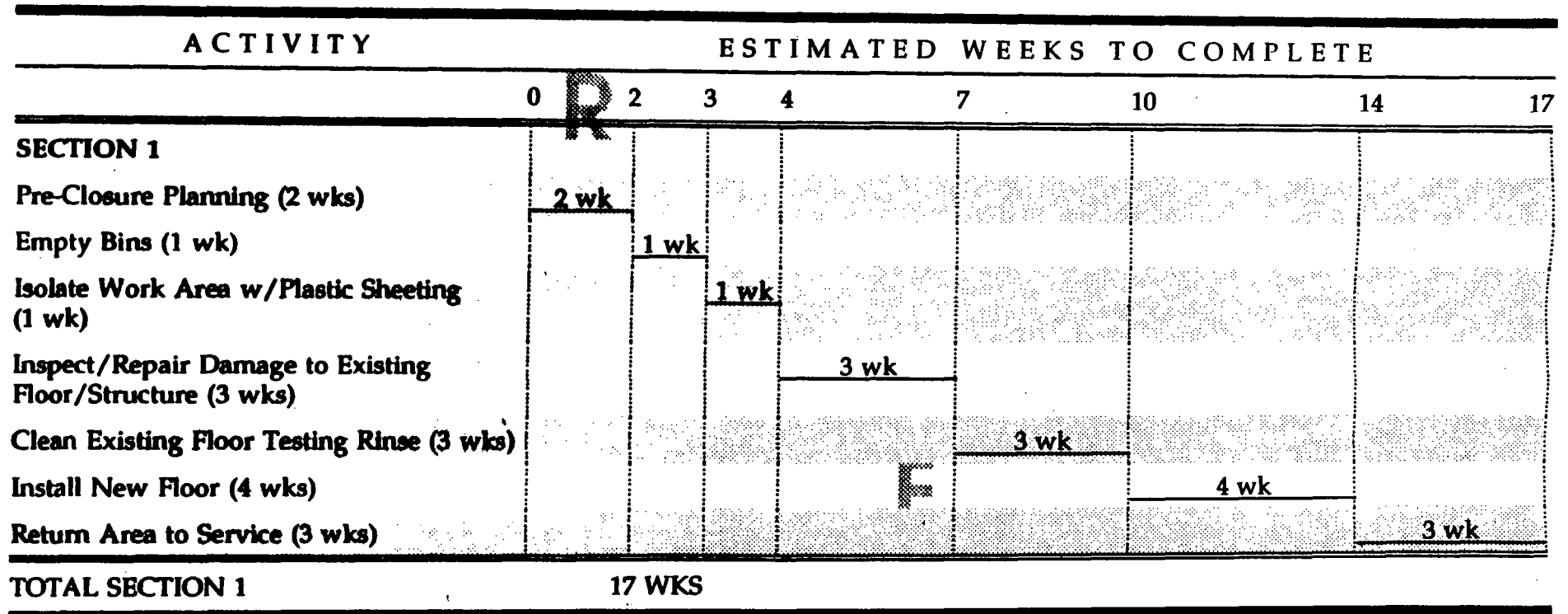
| ACTIVITY   | ESTIMATED WEEKS TO COMPLETE |        |         |        |     |
|--|-----------------------------|--------|---------|--------|-----|
|  | 0                           | 20     | 43      | 131    | 149 |
| Pre Closure Activities<br>(20 wks)                       | 20 wks                      |        |         |        |     |
| Phase I Closure<br>New Building Construction<br>(23 wks) |                             | 23 wks |         |        |     |
| Phase II Closure<br>Existing Building (88 wks)           |                             |        | 88 wks  |        |     |
| Phase III Closure<br>Outside Storage Areas<br>(18 wks)   |                             |        |         | 18 wks |     |
| AFTER PRE-CLOSURE REGULATORY APPROVAL                    |                             |        | 129 WKS |        |     |

# **PHASE I CLOSURE NEW MATERIAL STORAGE BUILDING**

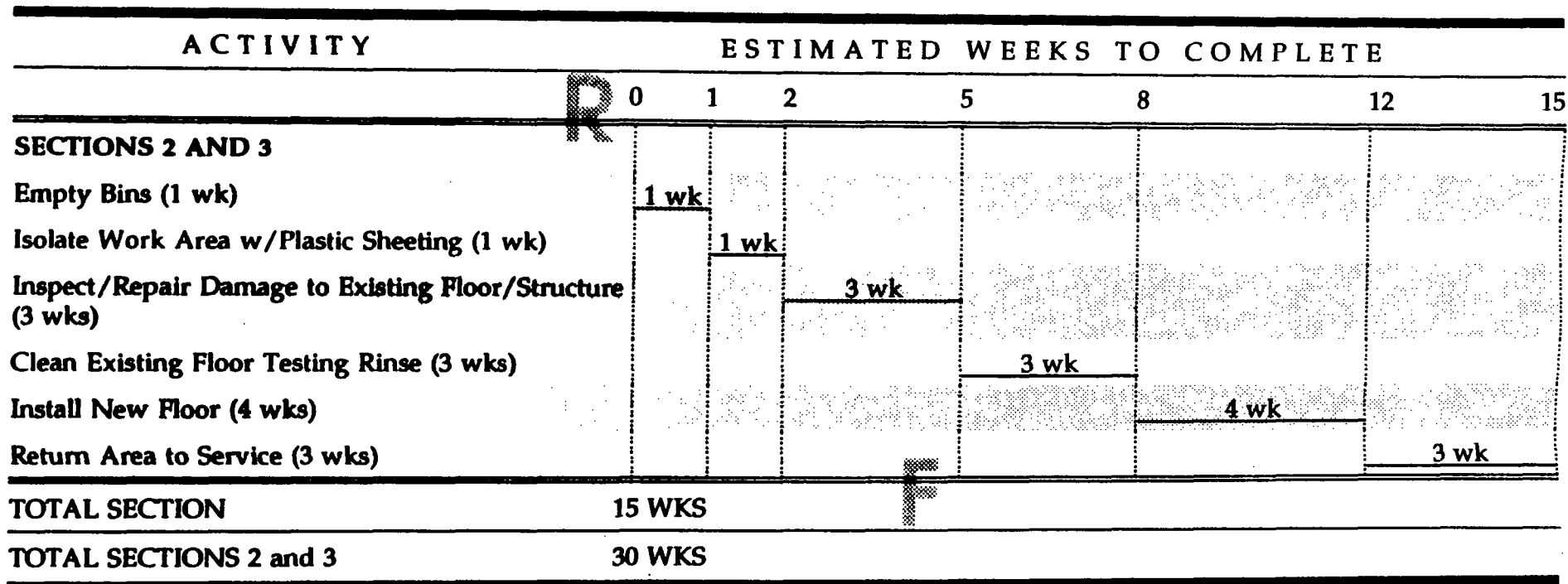
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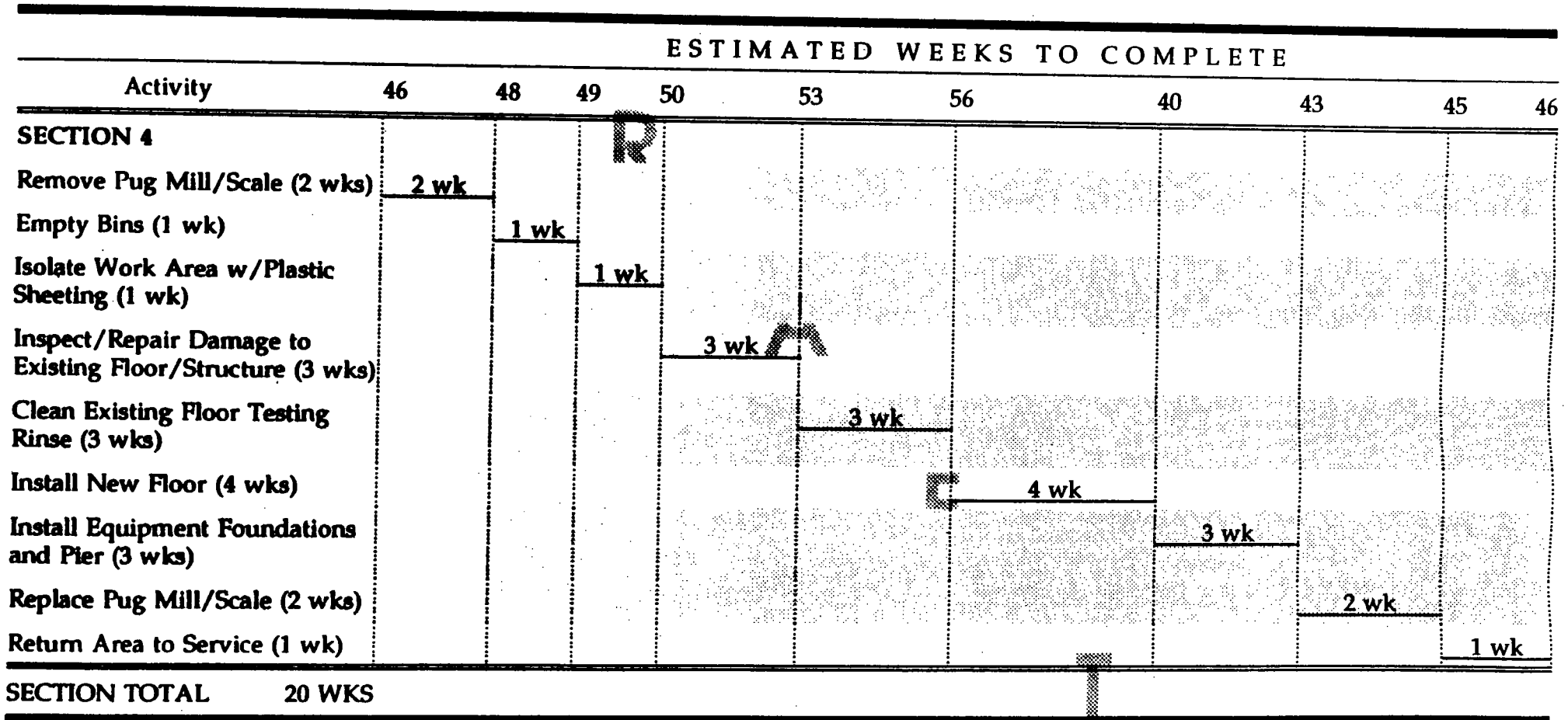
# **PHASE II CLOSURE EXISTING MATERIAL STORAGE BUILDING—MODIFICATIONS**



# **PHASE II CLOSURE EXISTING MATERIAL STORAGE BUILDING—MODIFICATIONS**



# **PHASE II CLOSURE** **EXISTING MATERIAL STORAGE BUILDING**



## PHASE II CLOSURE MATERIAL STORAGE BUILDING

ESTIMATED WEEKS TO COMPLETE

| Activity   | 63           | 65   | 66   | 67   | 70   | 73   | 77   | 80   | 83 | 84   |
|--|--------------|------|------|------|------|------|------|------|----|------|
| <b>SECTION 5</b>   |              |      |      |      |      |      |      |      |    |      |
| Disassemble/Remove Scale<br>Elevate Electrical Boxes (2 wks) | 2 wk         |      |      |      |      |      |      |      |    |      |
| Empty Bins (1 wk)  |              | 1 wk |      |      |      |      |      |      |    |      |
| Isolate Area w/Plastic Sheeting<br>(1 wk)                    |              |      | 1 wk |      |      |      |      |      |    |      |
| Inspect/Repair Damage to<br>Existing Floor/Structure (3 wks) |              |      |      | 3 wk |      |      |      |      |    |      |
| Clean Existing Floor Testing<br>Rinse (3 wks)                |              |      |      |      | 3 wk |      |      |      |    |      |
| Install New Floor (4 wks)                                    |              |      |      |      |      | 4 wk |      |      |    |      |
| Reassemble/Replace Scale<br>(3 wks)                          |              |      |      |      |      |      | 3 wk |      |    |      |
| Elevate Electrical Service/<br>Reconnect Scale (3 wks)       |              |      |      |      |      |      |      | 3 wk |    |      |
| Return Area to Service (1 wk)                                |              |      |      |      |      |      |      |      |    | 1 wk |
| <b>SECTION TOTAL</b>   | <b>21 WK</b> |      |      |      |      |      |      |      |    |      |

# **PHASE III CLOSURE OUTSIDE STORAGE AREAS**

| ACTIVITY  | ESTIMATED WEEKS TO COMPLETE |               |      |   |      |
|---|-----------------------------|---------------|------|---|------|
|   | 0                           | 1             | 4    | 8 | 9    |
| <b>SECTION 1</b>                                  |                             |               |      |   |      |
| Clear Area of Stored Materials (1 wk)             |                             | 1 wk          |      |   |      |
| Inspect/Repair Damage to Existing Surface (3 wks) |                             | 3 wk          |      |   |      |
| Cleaning Existing Surface, Testing Rinse (4 wks)  |                             |               | 4 wk |   |      |
| Return Area to Service (1 wk)                     |                             |               |      |   | 1 wk |
| <b>TOTAL SECTION</b>                              |                             | <b>9 WKS</b>  |      |   |      |
| <b>TOTAL SECTIONS 1 AND 2</b>                     |                             | <b>18 WKS</b> |      |   |      |

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